

**Tetra Tech, Inc.**

4213 State Street, Suite 100
 Santa Barbara, CA 93110-2847
 VOICE (805) 681-3100 FAX (805) 681-3108

Project: **Vandenberg Air Force Base IRP**Log of Well No. **35-MW-9**

Location: OU4, Site 35, approx. 450 ft southwest of El Rancho
 Oeste Road, and approx. 1,350 ft southwest of Building 1930.

Date Started: 3/11/98 Completed: 3/12/98

Logged By: J. Bonebrake
Harting Checked By: K. McNamara, R.G.Drilled By: B. Carpenter, S/G Testing *KM #6678*

Drilling Equipment: CME 75, 6-inch and 10-inch HSA

Sampling Equipment: 1 1/2-inch I.D. Split Spoon

GS Elev.: 346.8 ft above MSL TD: 20.5 ft bgs

4" PVC Bank Casing: from 0 ft bgs to 5 ft bgs

0.01" Screened Casing: from 5 ft bgs to 10 ft bgs

Bentonite/Cement Grout: from 0 ft bgs to 3 ft bgs

Bentonite Transitional Seal: from 3 ft bgs to 4 ft bgs

2/12 Sand Filter Pack: from 4 ft bgs to 12 ft bgs

TOC Elev.: 349.86 ft above MSL

Depth (ft bgs)	MATERIAL DESCRIPTION	Material Symbol	Material Type	Well Construction	Sample	Blow Counts per 6"	Percent Recovery	PID (ppm) Amb/Smp	REMARKS
5	<u>silty sand</u> , brown (10YR 5/3), fine grained, poorly graded, wet, little silt, alluvium.		SM					1.7/ 3.8	Start drilling 0950. Logged from cuttings at surface.
	<u>sandy silt</u> , strong brown (7.5YR 5/6), medium stiff, moist, some fine grained sand, few clay, alluvium.		ML						Logged from cuttings at 3 ft.
	<u>silty sand</u> , light gray (10YR 7/2), fine grained, poorly graded, medium dense, moist, alluvium.		SM			3 5 9	50	0/ 0.6	
10	<u>clayey sand</u> , gray (5YR 5/1), fine grained, poorly graded, medium dense, moist, little silt, alluvium.		SC						
	<u>silty clay</u> , olive gray (5Y 5/2), hard, moist, possible weathered bedrock.		CL			2 4 7	100	17.6/ 0	Distinct contact at 10 ft.
	<u>shale</u> , light gray (2.5Y 7/2), hard, dry, Sisquoc Formation.		Shale						Drilled to 20.5 ft in original boring. No distinct groundwater zone encountered. Moved approx. 5 ft north and drilled 10-inch hole to 12 ft. Constructed 4-inch well. Boring log shown is from original penetration.
15						4 7 12	100	13.6/ 0.4	
20									

Groundwater depth during drilling

9.2 ft bgs



Groundwater depth after well development on: 4/1/98

TC Number: A208-09

TETRA TECH, INC.

Page 1 of 2

**Tetra Tech, Inc.**

4213 State Street, Suite 100

Santa Barbara, CA 93110-2847

VOICE (805) 681-3100 FAX (805) 681-3108

Project: **Vandenberg Air Force Base IRP**Log of Well No. **35-MW-9**

Location: OU4, Site 35, approx. 450 ft southwest of El Rancho Oeste Road, and approx. 1,350 ft southwest of building 1930.

Depth (ft. bgs)	MATERIAL DESCRIPTION	Material Symbol	Material Type	Well Construction	Sample	Blow Counts per 6"	Percent Recovery	PID (ppm) Amb/Smp	REMARKS
20	shale, light gray (5Y 7/1), very stiff, wet, mottled, dark brown (7.5 YR 5/6) and black (7.5 YR 2.5/1), Sisquoc Formation.		Shale		<input checked="" type="checkbox"/>		100		Total depth of original hole at 20.5 ft. Grouted original hole from TD to surface.
25									
30									
35									
40									
45									